TOPOGRAPHIC SURVEY CONTROL POINT RECORD

STATION LONG NAME	MU17	
STATION NUMBER	MU17	
4 CHAR ID	MU17	
COUNTRY	IRAQ	
LOCATION	AL MUTHANNA	
SURVEYING AGENCY	IGRS	
DATE (OF DESCRIPTION)	05 JUL 05	

CONTENTS	YES	NO	NO OF PAGES
FIELD COORDINATE VALUES	Х		1
OFFICE COORDINATE VALUES	Х		1
STATION MONUMENT & SITE DETAILS	X		1
STATION DIAGRAM	X		1
ACCESS MAP	Х		1
ACCESS DESCRIPTION	Х		1
APPROACH PHOTOGRAPHS	Х		1
CARDINAL POINT PHOTOGRAPHS	Х		2

RECORD OF VISITS

DATE OF VISIT	NAME	UNIT	REMARKS

ADDITIONAL DETAILS/ENCLOSURES

CONTENTS	NO OF PAGES

SECURITY CLASSIFICATION

FIELD COORDINATE VALUES

STATION LONG NAME	MU17
4 CHAR ID	MU17
STATION NUMBER	MU17

THIS STATION IS NEW	YES
IDENTICAL / NEARLY IDENTICAL WITH	N/A

FIELD VALUES FROM THE RECEIVER / HAND HELD GPS – IN WGS84

LATITUDE N	30° 47′ 39.00′′	
LONGITUDE E	045° 27' 48.90''	
HT (M)	+81	
GRID ZONE DESIGNATOR	38R	
UTM / MGRS GRID	38R NV 443 068	
SURVEYING AGENCY	IGRS	

FIELD INPUT BY: L/CPL COWARD	UNIT: IGRS	DATE: 05 JUL 05
FIELD CHECKED BY: CPL RIGGOTT	UNIT: IGRS	DATE: 05 JUL 05

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OFFICE COORDINATE VALUES

WGS 84 ADJUSTED VALUES AS AT: 25 Aug 05

LATITUDE N	30° 47′ 38.85591′′
LONGITUDE E	045° 27' 49.04806''
SPHEROIDAL HT (M)	65.387
EGM96 GEOID MODEL HT (M)	-7.61
ORTHOMETRIC HT (M)	72.997
VERTICAL DATUM	WGS 84
GEOID MODEL USED	EGM 96
RELATIVE TO	CORS STATIONS
RELATIVE POSITION ACCURACY (M)	0.013
RELATIVE HEIGHT ACCURACY (M)	0.026
ADJUSTING AGENCY	OPUS
ADJUSTMENT DATE	25 AUG 2005

LOCAL DATUM VALUES AS AT: 25 Aug 05

SPHEROID	N/A
PROJECTION	N/A
GRID	N/A
VERTICAL DATUM	N/A
LATITUDE N/S	N/A
LONGITUDE E/W	N/A
EASTINGS (M)	N/A
NORTHINGS (M)	N/A
SPHEROIDAL HT (M)	N/A
ORTHOMETRIC HT (M)	N/A
GRID ZONE DESIGNATOR	N/A
TRANSFORMATION AGENCY	N/A
TRANSFORMATION DATE	N/A

GRAVITY VALUE: N/A	TY	PE OF STN: N/A	REF: N/A	
AIR PHOTO: N/A	REF: N/A		SCALE: N/A	
IMAGERY: N/A	REF: N/A		SCALE: N/A	

OFFICE INPUT BY: LCPL COWARD	UNIT: IGRS	DATE: 25 AUG 2005
OFFICE CHECKED BY: LCPL DICKEN	UNIT: IGRS	DATE: 25 AUG 2005

STATION MONUMENT AND SITE DETAILS

STATION LONG NAME: MU17

STATION NUMBER: MU17 4 CHAR ID: MU17

LOCATION: AL MUTHANNA COUNTRY: IRAQ

STATION ADDRESS: N/A

TEL: N/A FAX: N/A

LAND OWNER ADDRESS:

N/A

TEL: N/A FAX: N/A

TYPE OF MARK: HARN

CONDITION: GOOD

MARK SETTING: FINE MARK ON REBAR NO OF REBARS: 2

MONUMENT PHOTO / SKETCH



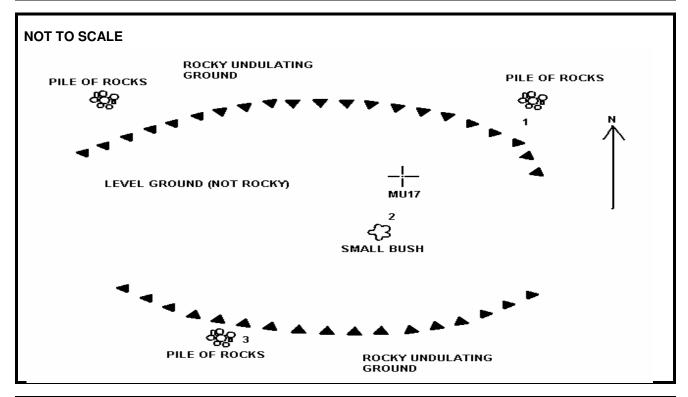
PREPARED BY: LCPL COWARD	UNIT: IGRS	DATE: 05 JUL 05
CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 05 JUL 05

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REVISION DATE: 05 FEB 98 TOPO FORM 01d

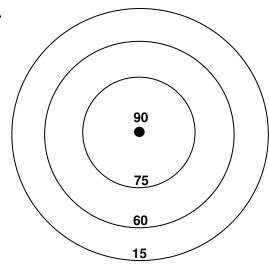
STATION DIAGRAM

STATION LONG NAME: MU17
STATION NUMBER: MU17
4 CHAR ID: MU17



NO	DESCRIPTION	BRG/HORZ ANGLE	DISTANCE
1	PILE OF ROCKS	238°	APPROX 145M
2	SMALL BUSH	7°	35M
3	PILE OF ROCKS	23°	APPROX 210M
4			

OBSCURITY DETAILS



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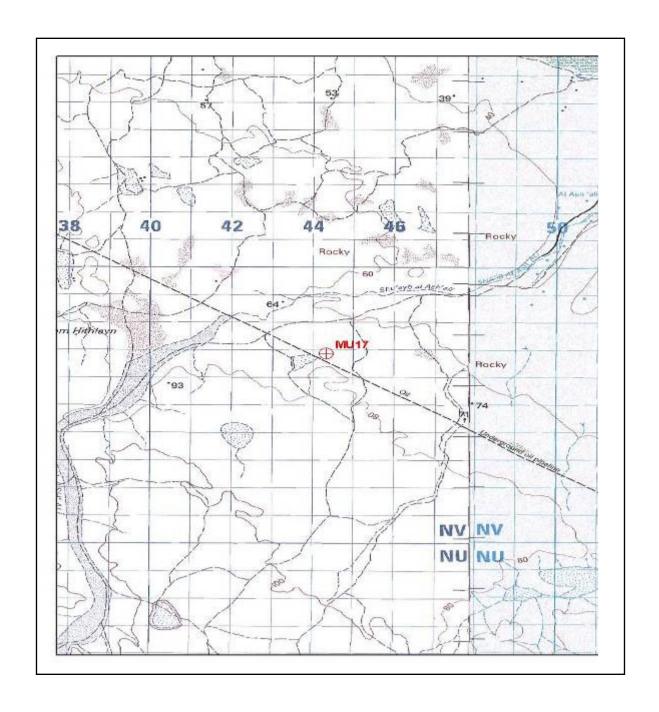
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REVISION DATE: 05 FEB 98 TOPO FORM 01e

ACCESS MAP

STATION LONG NAME: MU17
STATION NUMBER: MU17
4 CHAR ID: MU17

MAP DETAILS	SERIES: K643	SHEET: 5051
EDITION: 1-NIMA	SCALE: 1: 100,000	GR: 38R NV 443 068



PREPARED BY: SPR WILLIE	UNIT: IGRS	DATE: 05 JUL 05
CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 05 JUL 05

ACCESS DESCRIPTION

STATION LONG NAME: MU17
STATION NUMBER: MU17
4 CHAR ID: MU17

MAP DETAILS	SERIES: K643	SHEET: 5051
EDITION: 1-NIMA	SCALE: 1: 100,000	GR: 38R NV 443 068

NB. GPS WILL BE NEEDED TO NAVIGATE TO THIS POINT AS MOST OF THE JOURNEY IS DEPENDANT ON TRACKS.

From Main road South of Al Kadir traveling from a Southeast to a North-Westerly direction. At junction Grid Reference 38R NV 570 474 travel south for approximately 7.5km on metal road at crossroads grid reference 38R NV 573 419 travel south for approximately 6.5km. At this point GPS should be use as the rest of the journey will be tracks over farmlands and deserted areas. Harn identified by orange Survey Maker marks the point. The fine point is an indent on the head of rebar/rod.

PREPARED BY: SPR WILLIE	UNIT: IGRS	DATE: 05 JUL 05
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REVISION DATE: 05 FEB 98 TOPO FORM 01g

APPROACH PHOTOGRAPHS

STATION LONG NAME: MU17

STATION NUMBER: MU17 4 CHAR ID: MU17

NEAR APPROACH FACING WEST



FAR APPROACH FACING WEST



TAKEN BY: LCPL COWARD DATE TAKEN: 05 JUL 05

CARDINAL PHOTOGRAPHS

STATION LONG NAME: MU17

STATION NUMBER: MU17 4 CHAR ID: MU17

NORTH



SOUTH



TAKEN BY: LCPL COWARD DATE TAKEN: 05 JUL 05

CARDINAL PHOTOGRAPHS

STATION LONG NAME: MU17

STATION NUMBER: MU17 4 CHAR ID: MU17

EAST



WEST



TAKEN BY: LCPL COWARD DATE TAKEN: 05 JUL 05